Trust Standard Operating Procedure

Safe Use of Ligature Cutters

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<th>Issue Date</th>
<th>Review Date</th>
<th>Version</th>
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<td>August 2020</td>
<td>August 2025</td>
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**Purpose**

To provide guidance on the procedure for the safe use and management of ligature cutters.

To ensure that staff know how to access and use ligature cutters, and how to access ligature cutter training.

**Who should read this document?**

All staff working with UHPNT patients.

**Key Messages**

Patient safety is the highest priority for the Trust and its staff. Providing a clear approach to manage ligature risk, in line with best practice and legislative guidance, enables patients and the Trust’s commissioners to have confidence in Trust services.

The Trust is committed to identifying, removing or managing potential ligature points and other risks for suicide and self-harm for patients accessing UHPNT services.

Where it is not possible to remove ligature points the Trust will adopt other risk control measures including changes to buildings, fittings and operational and clinical management of the patient.

**Core accountabilities**

**Owner** Sophie King Physical Interventions Lead

**Review** Safeguarding Steering Committee

**Ratification** Chief Nurse – Lenny Byrne

**Dissemination (Raising Awareness)** Safeguarding Steering Committee

**Compliance** Safeguarding Steering Committee

**Links to other policies and procedures**

- UHPNT Paediatric Physical Interventions Policy
- UHPNT Health and Safety Policy
- UHPNT Safeguarding Adults at Risk Policy
- UHPNT Child Protection Policy/Supervision Policy
- UHPNT Guidelines for Assessing and Managing Ligature Points
- UHPNT Procedure for Individuals who are Violent or Aggressive
- UHPNT Incident Management Policy
- UHPNT Moving & Handling People and objects Policy
- UHPNT Policy and Procedures for the Safe Handling Management and Disposal of Hospital Waste
- UHPNT Lone Working Policy
- UHPNT Ligature Point Assessment Guidelines
- UHPNT Management of Non-Physical and Physical Intervention (Restraint) for Adults in an Acute Hospital Setting Policy
- UHPNT Enhanced Observation of Patients Policy
- UHPNT Estates Services Provision Policy
- UHPNT Supply Chain Inventory Management Policy
- UHPNT Window Safety: Record of Window Inspection
- UHPNT Resuscitation Policy
The Trust is committed to creating a fully inclusive and accessible service. Making equality and diversity an integral part of the business will enable us to enhance the services we deliver and better meet the needs of patients and staff. We will treat people with dignity and respect, promote equality and diversity and eliminate all forms of discrimination, regardless of (but not limited to) age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage/civil partnership and pregnancy/maternity.

An electronic version of this document is available on Trust Documents. Larger text, Braille and Audio versions can be made available upon request.
Standard Operating Procedures are designed to promote consistency in delivery, to the required quality standards, across the Trust. They should be regarded as a key element of the training provision for staff to help them to deliver their roles and responsibilities.

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Standard Operating Procedure (SOP)
The Use of Ligature Cutters

1 Introduction

Approximately 10% of suicides by ligature occur in controlled environments such as hospitals (Gunnell, Bennewith et al 2005). Despite risk assessments and efforts to ensure the safety and wellbeing of all patients who visit our Trust, there may be a situation when a patient may attempt to self-ligate. This may be by securing a ligature around their neck and attempting to suspend from a ligature point, or by tightening a ligature around their neck sufficiently tight enough to compromise the airway.

In these emergency situations, ligature cutters may need to be used rapidly. To safeguard the patient and staff, all staff working in areas where ligature cutters are provided will be instructed in the use of the ligature cutters and assessed in their use.

It is the responsibility of the member of staff to seek further instruction if required and this will be available when needed.

2 Definitions

Self –Harm by Ligature

Self-harm by ligature may involve strangulation or asphyxiation caused by suspending the body from a high ligature point, or by using a ligature point below head height.

Ligature:

A ligature can be defined as anything that a patient can use to suspend or strangle themselves with. It can be made of anything that can form a noose that may be used for self-strangulation and not necessarily obviously able to support body weight. It is important to note that in some instances ligatures are brought into the ward areas by the patient, they are either wearing it, or it is a personal belonging in their luggage. Medical equipment could provide a potential ligature too.

Examples: (this list is not exhaustive)

- Clothing accessories, belts, laces, tights, bras, scarfs, hair
- Plastic bags, carrier bags, clinical waste bags
- Lighting pull cords, curtain pull cords, curtain or venetian blind cords, draw cord on bags
- Shirts, blouses, t-shirts, ties, trousers
- Ropes and string
- Bedding (can also be torn into strips)
- Electrical leads, flex, telephone flex, charger leads, head phone leads
- Intravenous lines, monitoring cables
- Oxygen tubing

Ligature Cutter:

A specific device designed for cutting ligatures in a safe manner.
Ligature Anchor Point:
According to the Care Quality Commission (2015) a ligature point is anything which could be used to attach rope, cord or other material for the purpose of suspending or strangulation.

A ligature anchor point is a fixture or fitting that can be found within an internal or external environment that can be accessed by a patient.

Anchor points can include: (this list is not exhaustive)
- Gaps between a window or door and its frame
- Coat and towel hooks
- Window, cupboard or door handles
- Window curtain, blinds, bed curtain and shower rails
- Shower heads, shower controls, sinks, taps, plug and waste
- Cupboard edges/frames
- Door hinges and self-closers
- Ventilation grills, ceiling vents and ducts
- Door
- Bed
- Pipes
- Radiators
- Light fixtures

Anti-Ligature Fittings:
An anti-ligature fitting is any fitting that is designed in such a way as to prevent a ligature being attached to it:

An anti-ligature fitting should:
- Cause the ligature to slip off
- The fitting should break away from its mount (at 20kg or less) when placed under pressure of weight
- Anti-ligature curtains and curtain rails should break away at 40kg or less in accordance with manufacturer’s instructions
- Collapsible Fittings: Collapsible fittings are designed to collapse when weights in excess of 40Kg are applied. This is important to note as some patients are of a weight lower than 40Kg, where collapsible anti-ligature fittings may not manage the risk of suicide from suspension by ligature as they may not necessarily collapse under the loads imposed on them. In these circumstances the safety of the patient may need to be managed by increased observations

Environment: The external surroundings and conditions in which a patient interacts. This could be the physical or built environment – the actual building and fittings. Personal possessions may also need to be taken into account for example patient’s clothing.

The risks posed by a ligature point are increased if:
- It is in a room in which patients spend time unsupervised (for example lounge, toilet, bathroom, side room).
- It is in a ward/area used by high risk patients (for example challenging, confused or chaotic behaviour).
- The ligature point is between 0.7 metres and 4 metres from the ground.
3 | **Background**

Due to increasing numbers of Mental Health patients accessing the acute hospital setting and often prolonged inpatient stays of these patients, it is important that staff are aware of the potential dangers to patient safety with regard to suicide by ligature/self-strangulation.

This SOP takes into consideration UHPNT Health and Safety Policy, UHPNT Medical Devices Users Policy, UHPNT Ligature Point Management Policy, UHPNT Moving & Handling People and objects Policy, UHPNT Resuscitation Policy and UHPNT Ligature Point Assessment Guidelines.

4 | **Key Duties**

Staff will be responsible for maintaining their own knowledge and competence. It is the responsibility of the Line Manager’s and Matron’s to ensure that clinical staff working in their area are aware of the availability, location and have access to the ligature cutters.

The Department of Professional Health Care Education will ensure that The Ligature Cutter Rescue Packs are available on Resus Trolleys, and that there is an adequate supply of replacement stock.

The Department of Professional Health Care Education will ensure that staff have access to Ligature cutter training.

The Department of Professional Health Care Education will ensure that training records (OLM/ESR) for staff who have received this training are updated accordingly.

Managers must ensure that their staff are aware of this Standard Operating Procedure, have read it, and have accessed appropriate training.

Managers must ensure that the used contents of the Ligature Cutter Rescue Packs are replaced as soon as is practicable post use.

5 | **Training**

Staff will have access to training in the Safe Use of Ligature Cutters.

For further information with regard to accessing available training please contact:

plh-tr.conflictreolutiontrainingenquiries@nhs.net
Ligature cutters should only be used for ligature purposes.
Ligature cutters are specially designed to offer an effective and safe method of cutting a ligature attached to a patient.
The design of the cutters allows for the speedy and relatively safe insertion under the ligature, whilst minimising the risk of secondary injury to the patient or staff.
The cutting equipment will be located on the Resus Trolley as it is important that staff have quick and easy access.

Checks:
Ligature Rescue Packs should be checked regularly by staff to ensure the cutters are always available (forming part of the weekly Resus Trolley checks). The Ligature Rescue Packs which are stored on the bottom drawer of all Resus Trolleys should be checked to ensure the seal is intact.

The Use of Ligature Cutters in Practice:
Whilst this guidance cannot replace the need for appropriate staff training relating to ligature cutters, it is important that staff remember the fundamental points for effective response and use.

It is essential that staff always retain the cut ligature for later inspection in order to preserve incident evidence, i.e. forensic evidence in the event of a Police investigation. When cutting the ligature, cut away from (above) the knot to preserve evidence.
The Police may request to keep any of the ligature cutters after an incident. They will advise if they wish for the cutter/s to be decontaminated or not, due to preservation of evidence.

If you find a patient with a ligature in-situ, immediately call for assistance or activate an alarm, and ask for the Ligature Cutter Rescue Pack.
If you find a patient with a ligature in-situ and they are in possession of a weapon you must dynamically risk assess whether it is safe to approach the patient or not.

The Trust has 24/7 security in place. Security can be contacted in an emergency situation on extension 3333 via switchboard. Security Officers can provide support and assistance where appropriate e.g. when an individual is acting in a violent or aggressive manner and / or has a weapon.
If the incident occurs off site where there is no Security presence than the Police should be contacted.

A balance between staff safety and the welfare of the patient has to be assessed and circumstances or a situation could arise where staff safety is the overriding factor.

It is important to check the area for any hazards such as glass, water or electricity if the patient has used a power cord as a ligature, and make the area safe before the patient is approached. Do not cut through a power cord without checking that it is not plugged into a socket.

Response to finding someone with a ligature:
Call for assistance immediately, and if required call the crash team (2222 via switchboard).

If you find a patient with a ligature in situ immediately call for assistance from other staff members. Staff should ensure their own safety before attending a ligatured patient.

**Complete suspended strangulation:** A patient does not need to be suspended or clear of the floor to be using a ligature with lethal consequences.
Support the patient’s body weight (if safe to do so, based on your dynamic risk assessment of the situation).
Keep the body weight supported and/or the tension off the ligature until the ligature has been cut, if you are safely able to do so. In situations where the patient resists staff attempts to remove the ligature it may be necessary for staff to use appropriate physical interventions (restraint techniques). Also be aware that the patient could have concealed weapons on their person.

The ligature should be cut as soon as possible, mid-way between the ligature point and the patient (if possible), and then the ligature cut from around the patient’s neck.

Cut the ligature material at the thinnest point possible (if possible), avoiding any knots to ensure that the cut is made as quickly as possible.

Where possible, it is recommended to cut the ligature to the side of the neck, reducing the possibility of causing any additional trauma to the patient’s airway.

One staff member should cut the actual ligature whilst another staff member continues to support the patient’s body weight (if this is safe to do so).

Use the appropriate ligature cutter to cut the ligature from around the neck. Once the ligature has been cut, lower the patient to the floor as safely as is possible under the circumstances, without causing injury to yourself.

**Incomplete suspended strangulation (semi seated or kneeling):**

The priorities are to release the pressure the ligature is causing on the neck and to remove the ligature. Where possible the patient’s upper body (and head) should be supported and elevated by taking a secure hold around the upper body to reduce the tension on the ligature (if safe to do so). This is to reduce airway compromise if it is not possible to cut the ligature immediately, and will enable the patient to be supported when the ligature is cut (if you are able to do so). **DO NOT PULL ON THE LIGATURE TO REMOVE IT.**

**Lying strangulation:**

Staff should slide the patient toward the point of suspension (ligature anchor point) to reduce the tension on the ligature before removal.

**Ligature (unsuspended):**

The priorities are to release the pressure the ligature is causing on the neck and to remove the ligature. **DO NOT PULL ON THE LIGATURE TO REMOVE IT.**

In all cases always attempt resuscitation if there are no signs of life, and call 2222 for emergency assistance.

All such incidents must be reported following UHPNT Incident Management Policy.

Ligature cutters should be replaced once used as the blade may be blunted and less effective following use, and disposed of in a sharps container unless they are required for forensic evidence.

Staff members with an existing injury or those who are pregnant should not attempt any handling of the ligatured patient. All staff should take caution in emergency situations – assess the situation first to determine if it is safe to proceed.

Staff must complete Appendix 1 (Ligature Procedure Checklist) and ensure that all appropriate procedures have been followed and completed.
After use:

If the used ligature cutter is not required by Police, it must be disposed of in sharps container. Clinical areas must make arrangements for replacement of used equipment.

To replace stock please collect from level 6 Thrushel resuscitation equipment cupboard, ensuring you complete the emergency trolley restocking form which is stored in the Resus trolleys.
Ligature Rescue packs are located on the bottom drawer of the Resus trolley. Post Incident please retain all items not used, and replace used stock as soon as is practically possible.

The Rescue Pack will be stored on the Resus Trolley, with a laminated ligature information guidance sheet. (Appendix 3). The ligature cutters must not be placed in cupboards or drawers, it is important that staff have quick and easy access to the ligature cutters.

The ligature cutters will be held together in a red bag.

Each ligature rescue pack will contain the following:

1. **ResQHook**: Used for webbing, rope, nylon line, leather, electrical flex and clothing

2. **Tuff Cut Scissors**: Used for clothing, seat belts, leather and denim

3. **Big Fish Safety Knife**: 9mm mouth opening: Used for strapping, banding, seatbelts, clothing, cable ties, bubble wrap, tape, rope, string, netting, rubber and shrink wrap

4. **Cable and Wire Cutter**: Used for copper wire, brass wire, iron wire, aluminium wire and steel wire

5. **Lock Release Disc**: Use disc to open locked toilet doors from outside

Ligature cutters are specially designed devices that offer an effective and safe means of cutting a ligature that is tied around a patient’s body part. Ligature Cutter devices are purpose specific and must not be used for any other purpose than dealing with a ligature in an emergency situation. Ligature cutters are largely dependent on the sharpness of the blade, thus if used to cut anything
other than a ligature this will negatively impact on the effectiveness of the device. The sharpness of the ligature cutter is considered by UHPNT to be so important that ligature cutters are deemed as single use items once they have been utilised to cut a ligature.

8 | Risks

Do not cut through a live electricity cable using a ligature cutter device- disconnect (unplug) this type of ligature from the power first.

Never leave or place any ligature cutter device within access of any patient or visitor, as these devices could potentially be used as a weapon against others or to self-harm.

9 | Preserving Forensic Evidence

- If the patient is subsequently pronounced dead, the Police will treat this as 'unexplained' and as a crime scene until proved otherwise.
- Do not touch or disturb the area or other evidence until the Police give permission (apart from essential actions required to make the area immediately safe).
- Do not cut or untie the other end attached to the ligature point, to preserve forensic evidence.
- Make accurate written records and witness statements as soon as possible after the event.

10 | Post Incident Support for Staff

Involvement or exposure to a ligature incident could potentially be a traumatic event and staff may become distressed. Support may be required and as such the Trusts offers counselling services via Occupational Health Department ph-tr.OccupationalHealth-Derriford@nhs.net

11 | Document Ratification Process

The design and process of review and revision of this procedural document will comply with The Development and Management of Formal Documents.

The review period for this document is set as default of five years from the date it was last ratified, or earlier if developments within or external to the Trust indicate the need for a significant revision to the procedures described.

This document will be approved and ratified by the Safeguarding Steering Committee.

Non-significant amendments to this document may be made, under delegated authority from the Committee, by the nominated author. These must be ratified by the Director (Chair of the Committee) and should be reported, retrospectively, to the Committee.

Significant reviews and revisions to this document will include a consultation with named groups, or grades across the Trust. For non-significant amendments, informal consultation will be restricted to named groups, or grades that are directly affected by the proposed changes.

12 | Dissemination and Implementation

Following approval and ratification, this procedural document will be published in the Trust's formal documents library and all staff will be notified through the Trust's normal notification process, currently the ‘Vital Signs’ electronic newsletter.

Document control arrangements will be in accordance with The Development and Management of Formal Documents.
The document author will be responsible for agreeing the training requirements associated with the newly ratified document with the Safeguarding Steering Committee and with UHPNT Department of Professional Healthcare Education Administration Team.

### 13 Monitoring and Assurance

Incidents of attempted suicide will be monitored through UHPNT incident reporting procedure, and will be reviewed via appropriate UHPNT Committees, and any subsequent actions identified.

Wards or Department will undertake ligature assessments and follow UHPNT Guidelines for Assessing and Managing Ligature Points. The Ligature assessment is a clinical risk and is managed in line with the Enhanced Observation Policy.

Numbers and names of staff trained will be recorded using UHPNT recording systems (ESR/OLM); this will be managed by UHPNT Department of Professional Healthcare Education Administration Team.

### 14 Reference & Resource Material


Resources:

- University Hospitals Bristol NHS Foundation Trust (2019) The Use of Ligature Cutters Standard Operation Procedure (Safety Department)


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<td>In the event of a medical emergency, i.e. patient not responding, presenting unconscious, not breathing, not pulse detected, Crash team called (this is not an exhaustive list) – <em>Always attempt resuscitation in line with trust policy.</em></td>
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| |  
| If the patient is subsequently pronounced dead – *forensic evidence to be preserved (e.g. ligature and cutters)* | | |  

| |  
| Doctor informed. | | |  

| |  
| Physical observations taken. | | |  

| |  
| Parents/Next of kin informed. | | |  

| |  
| Site Manager/Senior Nurse informed | | |  

| |  
| Ligature site/area assessed and treated if required. | | |  

| |  
| Document in patient’s notes. | | |  

| |  
| Observation level reviewed and recorded in notes (if applicable). | | |  

| |  
| Level of risk assessed and recorded in notes (if applicable). | | |  

| |  
| Care plan updated (if applicable). | | |  

| |  
| Datix completed and reference number recorded in patient’s notes. | | |  

| |  
| Debrief provided to non-staff by Ward Manager/Senior Nurse/Site Manager. | | |  

| |  
| Debrief provided to staff involved in the incident by Ward Manager/Senior Nurse/Site Manager. | | |  

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Please scan this to plh-tr.conflictreolutiontrainingenquiries@nhs.net when completed as soon as is practicable.
Ligature Cutter Quick Reference Guide

**LIGATURE CUTTERS**

- **EQUIPMENT CONTAINER**
  - Wipe clean surface
  - Check seal on shift change

- **TUFF CUT SCISSORS**
  - Use for clothing, belts, leather, denim

- **RESQHOOK**
  - Webbing, rope, nylon line
  - Leather, electrical flex, clothing

- **PENNY WASHER ON KEY RING**
  - Use washer to open locked toilet doors from outside

**USE AND APPLICATION**

- **CABLE & WIRE CUTTER**
  - Copper, brass or iron wire
  - Aluminium & steel wire

- **BIG FISH OR SHARK SAFETY KNIFE**
  - Strapping, bubble wrap, tape
  - Rope, shrink wrap

Replacement stock can be obtained from the Resuscitation Equipment Cupboard, Thrushel Ward, Level 06